

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

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In re: Methyl Tertiary Butyl Ether ("MTBE") : Master File No. 1:00-1898  
Products Liability Litigation : MDL No. 1358 (SAS)  
: M21-88

This Document Relates To: : The Honorable Shira A. Scheindlin  
*Orange County Water District v. Unocal* :  
Corporation, et al., Case No. 04 Civ. 4968 :  
(SAS). :  
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**SECOND SUPPLEMENTAL DECLARATION OF STEPHEN W. WHEATCRAFT, Ph.D.  
IN SUPPORT OF PLAINTIFF'S OPPOSITION TO MOTION FOR  
SUMMARY JUDGMENT**

**DECLARATION OF STEPHEN W. WHEATCRAFT**

I, Stephen W. Wheatcraft, hereby declare as follows:

1. As part of my work in this case I prepared a contaminant transport model based on the hydrogeological characteristics of the aquifer in Orange County as explained in my expert report, rebuttal report and supplemental declaration in this case.

2. I have reviewed the brief defendants submitted in response to the supplemental declaration I previously submitted. I also have reviewed the declaration of Jon Anderson (and accompanying exhibits) and the declaration of John Wilson submitted in response to my supplemental declaration.

3. The responses assert that because I modeled individual stations in two other cases (Crescenta Valley and South Tahoe) I could and should have modeled individual stations in the Orange County Water District case. This assertion is both inaccurate and overly simplistic.

4. I did not separately model each station in Crescenta Valley.

5. In Crescenta I separately modeled one station that was geographically distinct from other stations. This is the Arco station referenced in the deposition transcript excerpt attached as Exhibit D to the Declaration of Jon Anderson. I modeled that station separately in order to address a groundwater divide problem unique to that station. As noted in the deposition transcript attached as Exhibit E to the Declaration of Jon Anderson, I also did a number of runs with all of the stations in the Crescenta case in order to calibrate the model. I was asked: "Am I correct that you did eight runs with all the stations included?" My answer was: "That's right."

6. In South Tahoe I modeled stations both separately and together. In South Tahoe there were twelve sources spread out over approximately ten miles. In South Tahoe I estimated the amounts of MTBE from each source and injected the estimated amounts into the model for each individual source, then ran the model for just that source. This exercise took only a few minutes per run. While this exercise had value in the context of the South Tahoe model, it artificially eliminated actual MTBE being contributed by other sources. In OCWD, I used actual MTBE levels detected in station monitoring wells, many of which were associated with more than one station. As explained in my prior supplemental declaration, the clustering of many of the stations in the OCWD model made it impossible as a practical matter to assign to a single station the MTBE levels found in monitoring wells common to multiple stations.

7. There are numerous factors that must be considered when selecting an approach to a particular modeling problem. No responsible hydrogeologist tasked with developing a fate and transport model for a particular problem area would simply replicate models developed for different problem areas.

8. The area encompassed by the Orange County Water District is orders of magnitude larger than the areas served by the Crescenta Valley Water District and the South Tahoe Public Utilities District. In the Orange County Water District I modeled thirty four stations. In Crescenta Valley I modeled eight stations. In South Tahoe I modeled twelve

stations.

9. Models in the Crescenta Valley and South Tahoe cases took only minutes to run. The model in the Orange County Water District case took weeks to run.

10. As I stated in my prior supplemental declaration, in the Orange County Water District case most of the stations I modeled were located in close proximity to other stations and MTBE from the stations comingled almost immediately in the shallow aquifer, thereby precluding separate runs. Defendants and Dr. Wilson do not address this or any other differences between the Orange County Water District and the Crescenta and South Tahoe water districts.

11. Dr. Wilson agrees with me that running individual stations in my Orange County Water District model would have been difficult. Wilson Declaration, paragraph 10. Dr. Wilson states that it would have been "possible" to perform individual station runs. Dr. Wilson, however, does not address the point I made in my supplemental declaration that, while it may have been possible to perform individual station runs for some stations, it was not possible to do so for most of the stations due to clustering. He also does not address my statement that for the stations where it was possible to do individual stations runs those runs would have been extremely expensive and time consuming and the results would have been subject to even more criticism because so much information would have been excluded from the runs.

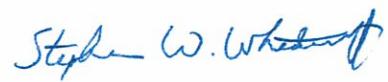
12. Dr. Wilson states: "to determine whether it is more likely than not that the contamination from one source in an overlapping or commingled plume impacts a supply well or other reference point one needs to determine whether a pathway exists between that source and the well." Wilson Declaration, paragraph 18. I agree with this statement.

13. Dr. Wilson then states: "Using modeling, this requires an individual station model run for each source." Wilson Declaration, paragraph 18. I disagree with this statement. Individual station models are not required to determine whether there is a pathway from a source or sources to a supply well. Pathways can be and frequently are determined in modeling for multiple sources by running the sources simultaneously.

14. Defendants' response quotes an excerpt from my deposition in which I state: "I haven't done any analysis . . . that identifies MTBE from a specific station and whether it mingles or comingles with other plumes and whether or not MTBE from a particular station reaches a particular well." As I stated elsewhere in that same deposition, and as I stated in my expert report and my supplemental declaration, the fact that I did not isolate each station and run the model for each station (which would have taken three weeks per station) does not mean that the model does not show that MTBE from each station will impact wells. The model shows, and it is my opinion, that MTBE from each station will enter a plume, comeingle with MTBE from other stations, and then impact one or more wells.

I declare under penalty of perjury under the laws of the State of Nevada that the foregoing is true and correct.

Executed this 29th day of October 2014, at Reno, Nevada.



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Stephen W. Wheatcraft

*In Re Methyl Tertiary Butyl Ether (MTBE) Products Liability Litigation:  
Orange County Water District v. Unocal Corp., et al., Case No. 04 Civ. 4968*

## **PROOF OF SERVICE VIA LEXISNEXIS FILE AND SERVE**

I am a citizen of the United States and an employee in the County of Sacramento. I am over the age of eighteen (18) years and not a party to this action. My business address is Miller, Axline, & Sawyer, 1050 Fulton Avenue, Suite, 100, Sacramento, California 95825.

On the date executed below, I electronically served the document(s) via LexisNexis File & Serve, described below, on the recipients designated on the Transaction Receipt located on the LexisNexis File & Serve website:

**SECOND SUPPLEMENTAL DECLARATION OF STEPHEN W. WHEATCRAFT,  
PH.D., IN SUPPORT OF PLAINTIFF'S OPPOSITION TO MOTION FOR SUMMARY  
JUDGMENT**

I declare under penalty of perjury that true and correct copies of the above document(s) were served via LexisNexis File & Serve on October 29, 2014.

Kathy Herron  
KATHY HERRON